

MOTOROLA INTEGRATED CIRCUITS
TTL III 54H00 - 74H00 Series

Rating	Value	Unit
Supply Voltage - V_{CC}	+7.0	V
Input Voltage - V_{in}	+5.5	V
Output Voltage - V_{out}	+5.5	V
Operating Free-Air - Temperature Range	-55 to +125	°C

Function	Type/Pkg	Loading Factor Each Output	Power Dissipation mW typ/pkg
Quad 2-Input Positive NAND Gate	54H00/C,A	10	88
Quad 2-Input Positive NAND Gate (O.C.)	54H01/C,A	10	88
Quad 2-Input NOR Gate	54H02/C,A	10	122
Hex Inverter	54H04/C,A	10	140
Hex Inverter	54H05/C,A	10	90
Quad 2-Input Positive AND Gate	54H08/C,A	10	112
Triple 3-Input Positive NAND Gate	54H10/C,A	10	66
Triple 3-Input Positive AND Gate	54H11/C,A	10	84
Triple 3-Input NAND Gate (O.C.)	54H12/C,A	10	66
Dual 4-Input Positive NAND Gate	54H20/C,A	10	44
Dual 4-Input AND Gate	54H21/C,A	10	56
Dual 4-Input NAND Gate (O.C.)	54H22/C,A	10	44
Dual 3-Input 3-Output AND Series Terminated Line Driver	54H28/C,A	-	56
Dual 3-Input 3-Output NAND Series Terminated Line Driver	54H29/C,A	-	44

Function	Type/Pkg	Loading Factor Each Output	Power Dissipation mW typ/pkg
8-Input Positive NAND Gate	54H30/C,A	10	22
8-Input NAND Gate	54H31/C,A	10	22
Quad 2-Input OR Gate	54H32/C,A	10	150
Dual 4-Input NAND Power Gate	54H36/C,A	20	70
Dual 4-Input AND Power Gate	54H39/C,A	20	90
Dual 4-Input Positive NAND Buffer Gate	54H40/C,A	30	90
Expandable Dual 2-Wide 2-Input A.O.I. Gate	54H50/C,A	10	62.5
Dual 2-Wide 2-Input AND-OR-INVERT Gate	54H51/C,A	10	62.5
Expandable 4-Wide 2-2-2-3 Input A.O.I. Gate	54H52/C,A	10	87.5
Expandable 4-Wide 2-2-2-3 Input A.O.I. Gate	54H53/C,A	10	40
4-Wide 2-2-2-3 Input AND-OR-INVERT Gate	54H54/C,A	10	40
Expandable 2-Wide 4-Input AND-OR-INVERT Gate	54H55/C,A	10	30
Dual 4-Input Expander for AND-OR-INVERT Gates	54H60/C,A	10	15
Triple 3-Input Expander for AND-OR Gates	54H61/C,A	10	25
4-Wide 3-2-2-3 Input Expander for A.O.I. Gates	54H62/C,A	10	40
OR Input J-K Flip-Flop	54H71/C,A	10	95
AND Input J-K Flip-Flop	54H72/C,A	10	80
Dual J-K Master-Slave Flip-Flop	54H73/C,A	10	176
Dual Type D Edge-Triggered Flip-Flop	54H74/C,A	-	-

Function	Type/Pkg	Loading Factor Each Output	Power Dissipation mW typ/pkg
Dual Type D Flip-Flop	54H79/C,A	10	120
Quad 2-Input Exclusive OR Gate	54H86/C,A	8	100
4-Bit True/Complement Zero/One Element	54H87/C,A	-	-
Quad 2-Input Exclusive NOR Gate	54H89/C,A	8	85
J-K Edge-Triggered Flip-Flop	54H101/C,A	-	-
J-K Edge-Triggered Flip-Flop with AND Inputs	54H102/C,A	-	-
Dual J-K Edge-Triggered Flip-Flop	54H103/C,A	-	-
Dual J-K Edge-Triggered Flip-Flop	54H108/C,A	-	-
AND J-K Flip-Flop	54H116/C,A	10	50
AND Input JJ-KK Flip-Flop	54H117/C,A	10	75
Dual J-K Flip-Flop	54H119/C,A	10	100
Dual J-K Flip-Flop	54H120/C,A	10	100